

REMARKS

This amendment is submitted as a full and complete response to the Office Action dated September 20, 2006. Reconsideration and allowance of the claims is requested. The independent claims have been amended in each instance to more distinctly claim the subject matter that the Applicants regard as the invention. An explanation of each amendment appears below.

Claims 3-8, and 10

Claims 3-8 and 10 are rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. Applicant is amending claims 3-8 and 10 to comply with the written description requirement of 35 U.S.C. § 112. In particular, “real time units” has been changed to “time units” in order to clarify that the time units are conventional units of time, such as nanoseconds, microseconds, or the like, as described in paragraph [0047] of the present application.

Claims 1-20

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Ramakrishnan* (U.S. Patent No. 6,085,215). Claims 1-3, 5, 9, 10, and 16-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Wang* (U.S. Patent No. 5,828,881). These rejections are respectfully traversed.

Applicant is canceling claims 16 and 19. Applicant is amending claims 1 and 9 to include the limitations of (i) masking interrupts from hardware devices in order to ignore interrupts for other threads, (ii) unmasking interrupts from hardware devices in order to detect interrupts for the other threads, and (iii) rearranging an order in which the thread and the other threads will be serviced to schedule the thread for processing in accordance with said latency information. The masking and unmasking of interrupts is shown in Figure 4 and described in paragraphs [0046] and [0047]. Rearranging the order in which the threads will be serviced is described in paragraphs [0043] and [0047]. Importantly, the order is rearranged to accommodate the latency requirements for the current thread as well as the other threads.

The Examiner relies on *Ramakrishnan* for the teaching of receiving a latency associated with a thread and scheduling the thread. Specifically, *Ramakrishnan* teaches the step of scheduling threads using a round-robin scheme, as shown in Figure 5 and described in column 5, lines 54-67 as well as column 9, lines 11-22 of the reference. The round-robin scheme allows the processing of a particular thread to be skipped (based on a thread flag), but does not permit rearranging the order in which the threads are serviced. Weights are used to determine the amount of time spent processing each thread, as described in column 5 lines 64-67. However, the weights are not used to rearrange the order in which the threads are serviced. Furthermore, *Ramakrishnan* does not teach masking interrupts and unmasking interrupts from hardware devices, as recited in amended claims 1 and 9.

The Examiner also relies on *Wang* for the teaching the step of receiving a latency associated with a thread and scheduling the thread. *Wang* teaches running a thread that has a closest deadline until the thread is preempted, as described in column 7, lines 32-56. However, *Wang* does not teach masking interrupts from hardware devices, acquiring latency information for the thread, or unmasking interrupts from hardware devices, as recited in amended claims 1 and 9.

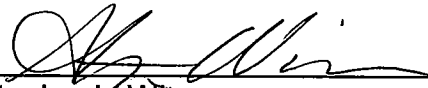
As the foregoing illustrates, each of the cited references fails to teach the limitations of amended claims 1 and 9 discussed herein. This failure precludes either *Ramakrishnan* or *Wang* from anticipating amended claims 1 and 9. For these reasons, Applicant submits that amended claims 1 and 9 are in condition for allowance and respectfully request withdrawal of the 35 U.S.C. § 102(b) rejection of this claim. Since claims 2-8, 17-18, 20 and new claims 21-22 depend from allowable claim 1 and claims 10-15 depend from allowable claim 9, these claims also are in condition for allowance.

Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed. Applicants reserve the right to subsequently take up prosecution of the claims as originally filed in this application in a continuation, a continuation-in-part and/or a divisional application. If the Examiner has any questions, please contact the Applicants' undersigned representative at the number provided below.

Respectfully submitted,



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